

Applicants would like to thank Examiner Crenshaw for the courtesies extended to Applicants' representative, Mr. Jason Vick, during the numerous recent telephone interviews.

The Office Action rejects claims 1-4 and 6 under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 4,051,777 to Black (hereinafter "Black") in view of U.S. Patent No. 3,843,974 to Miller et al. (hereinafter "Miller"). This rejection is respectfully traversed.

The Office Action asserts that Black discloses a stencil printer comprising an ink supply pump in the form of a diaphragm pump. However, the Office Action concedes that Black does not teach the use of silicon rubber. The Office Action points to Miller for teaching a diaphragm pump which is made of silicon rubber. Thus, the Office Action concludes it would have been obvious to one of ordinary skill in the art to make the diaphragm of Black with the silicon rubber as taught by Miller to prevent deterioration.

Claim 1 recites, "A stencil printer comprising an ink supply pump in the form of a diaphragm pump, wherein a drive assembly is adapted to operate between a first and second point such that a stress applied to a diaphragm is limited to less than 75% of the elastic limit of the diaphragm."

The cited references, either alone or in combination, simply fail to teach, suggest or disclose any type of method or structure that can be used to limit the stress applied to a diaphragm. Furthermore, the references fail to teach, suggest or disclose limiting a stress applied to a diaphragm to less than 75% of the elastic limit of the diaphragm.

The Office Action states that the functional recitations set forth in the claims have not been given patentable weight because they are narrative in form. Applicants respectfully submit that there is sufficient positively recited structure such that the claims are definite for what they fairly convey to a person of ordinary skill in the art in the context in which it is used. In particular, and in accordance with MEP 2173.05(g) "there is nothing inherently wrong with defining some part of the invention in functional terms. Functional language does not, in and of itself, render a claim improper." *In re Swineherd*, 439 Fd. 210, 169 USP 266. "A functional

limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art and the context to which it is used.” In *In re Venes*, 530 F.2d. 956, 189 USP 149, the court held that limitations such as “members adapted to be positioned” and “portions..... being resiliently dilatable whereby said housing may be slidably positioned” serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. Accordingly, Applicants respectfully request the Office to give full patentable weight to the features as set forth in claims 1-4 and 6.

Accordingly, Applicants respectfully submit that since the cited references, either alone or in combination, fail to teach, suggest or disclose each and every aspect of the claims, the references fail to render obvious claims 1-4 and 6. Reconsideration and withdrawal of the rejection of claims 1-4 and 6 under 35 U.S.C. §103(a) is respectfully requested.

The Office Action rejects 5 and 7 under 35 U.S.C. §103(a) as unpatentable over Black in view of Miller and further in view of U.S. Patent No. 5,019,202 to Kawahata et al. (hereinafter “Kawahata”). This rejection is respectfully traversed.

The Office Action asserts that Black modified by Miller teaches all of the limitations of claims 1-4 and 6, however, concedes that Miller and Black do not teach the use of an ultraviolet ray curing ink. The Office relies on Kawahata for the teaching of an ultraviolet ray curing ink and points specifically to col. 6, lines 30-40,

Applicants respectfully disagree. In particular, and as recited on col. 4, lines 54-58 of Kawahata “a printed pattern layer is formed with a printing ink containing a curable resin as the vehicle, and the above printed pattern layer is not a printed layer by solid printing, but is formed as partially printed pattern layer.” Applicants’ concede that col. 6, lines 32-35 of Kawahata disclose that “when the vehicle in the above printing ink is, for example, a curable resin comprising a thermosetting, electron/beam curable or UV-ray curable resin...” However, Kawahata fails to disclose ultraviolet curing ink. To the contrary, Kawahata discloses a UV-ray curable resin vehicle for ink. Therefore, Applicants respectfully submit that the cited references, either alone or in combination fail to teach, suggest or disclose ultraviolet curing ink as claimed. Withdrawal of the rejection of claims 5 and 7 under 35 U.S.C. §103(a) is respectfully requested.

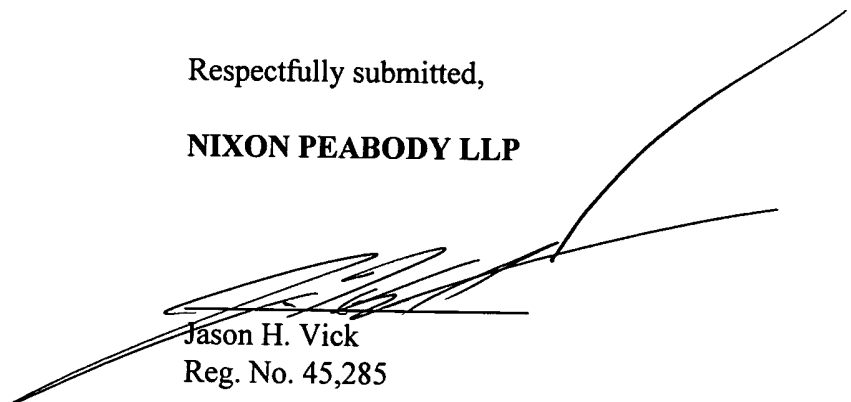
Attorney Docket No. 74050-814
Appln. Serial No.: 09/639,850
Group Art Unit: 2854

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the telephone number listed below.

Applicants respectfully submit that claims 1-7 are in condition for allowance. A prompt and favorable Notice of Allowance is respectfully requested.

Respectfully submitted,

NIXON PEABODY LLP



Jason H. Vick
Reg. No. 45,285

JHV/jr
Attorney Docket No. 740250-814

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
Telephone (703) 790-9110

Attorney Docket No. 740250-814
Appln. Serial No.: 09/639,850
Group Art Unit: 2854

Marked- Up Version of Amended Claims

1. (Amended) A stencil printer comprising an ink supply pump in the form of a diaphragm pump, wherein a drive assembly [limits] is adapted to operate between a first and a second point such that a stress applied to a diaphragm is limited to less than 75% of the elastic limit of the diaphragm.